A NEW LICHEN SPECIES, NIEBLA CEDROSENSIS (RAMALINACEAE), IS DESCRIBED FROM BAJA CALIFORNIA, MEXICO

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ABSTRACT

A new species, Niebla cedrosensis Marsh & Nash, sp. nov., is described from Baja California, México. This saxicolous species has pendant terete branches, black pycnidia, terminal to subterminal apothecia and adglutinated hyphae in the medulla. At its center of distribution on Isla Cedros, the thallus has a distinctive pale yellow-green color due to cortex abrasion.

KEY WORDS: lichen, Ramalinaceae, Baja California

Niebla cedrosensis Marsh & Nash, sp. nov. (Figure 1). TYPE: MEXICO. Baja California. Isla Cedros at southwest end, NE of Wayle, 28°07′ N 115°19′ W: on siliceous pebble on steep hillside, N aspect, 150 m elevation. March 22, 1994. Marsh 7460 (ASU). Isotype (1): (ASU).

Description: Thallus saxicolus, pendulus usque ad 6.0 cm longus, luteo-viridis pallido; rami teretes ad 1.5 mm lati; medulla densa cum hyphae adglutinae continuae.

Thallus fruticose, saxicolous, pendant to 4.5 cm (-10.5 cm) long, 1.5 mm wide, stiff terete branches from a thick narrowly attached holdfast. Cortex smooth/foveate/reticulate, sometimes transversely cracked. Medulla solid, of adglutinated hyphae without distinctive chondroid strands, as is the case in the Niebla homalea group. Pycnidia black, on upper two-thirds of branch. Apothecia terminal to subterminal, to 4.5 mm diameter, multiple, disc white, pruinose; spores 8, straight to slightly curved, 2-celled, hyaline, 10.0-14.0 \times 3.0-4.0 $\mu \rm m$.



Figure 1. Niebla cedrosensis, (Type in ASU). (Scale=mm).

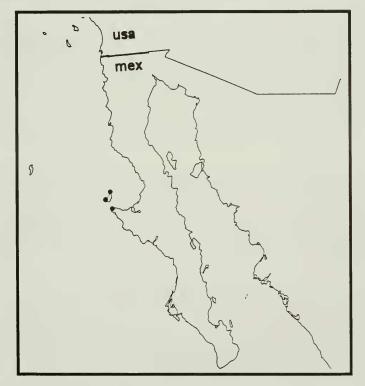


Figure 2. Distribution of Niebla cedrosensis.

Chemistry: $\pm usnic$, $16-\alpha$ -hydroxykurane, zeorin, unknown triterpene, \pm salazinic acid

Habitat and Distribution: Niebla cedrosensis is saxicolous on sides and overhangs of boulders and rock outcrops. It is restricted to Cedros Island and the tip of the Vizcaino Peninsula (Figure 2) at 40-500 m elevation. Wind and salt and/or sand have abraded the thalli of this species so that it has a distinctive pale whitish yellow-green appearance and hence stands out from all other Niebla/Ramalina species. One yellowish-green non-abraded collection was found from Bahía Tortuga at the north-western tip of the Vizcaino Peninsula (13 miles southeast).

Representative Specimens Examined: MEXICO. Baja California: Isla Cedros, north end, Marsh 7194, 7283, 7294, 7295, 7306, 7309, 7339, 7342, 7344 (ASU); Nash 5 collections s.n., southwest end, Marsh 7418, 7446, 7458, 7523 (ASU). Bahía Tortuga, Marsh 4279 (ASU).

Remarks: Since the distribution of Niebla cedrosensis is restricted to Cedros Island and the tip of the Vizcaino Peninsula, this species should not be confused in the field. Other saxicolous Niebla species whose distributions overlap that of N. cedrosensis are N. josecuervoi (Rundel & Bowler) Rundel & Bowler having only salazinic acid (Rundel et al. 1972) and flat branches; this species has two morphologies in this area, 1) long thin spirally twisted branches, 2) broad fan-like branches. Another species being described separately with similar chemistry is the same size as N. cedrosensis, but has sordid green branches, usually with black necrotic tissue at the base and lower portion of the branch and lacks adglutinated medullary hyphae.

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LITERATURE CITED

Rundel, P.W., P.A. Bowler, & T.W. Mulroy. 1972. A fog-induced lichen community in northwestern Baja California, with two new species of *Desmazieria*. The Bryologist 75:501-508.